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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,181	05/01/2006	Jay S. Walker	04-027	5212
22927 7590 07/06/2010 WALKER DIGITAL MANAGEMENT, LLC 2 HIGH RIDGE PARK STAMFORD, CT 06905				
EXAMINER				
LONG, PONYA M				
ART UNIT		PAPER NUMBER		
3689				
MAIL DATE		DELIVERY MODE		
07/06/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/578,181

**Applicant(s)**

WALKER ET AL.

**Examiner**

FONYA LONG

**Art Unit**

3689

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04/21/2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This communication is a Non-Final Office Action rejection on the merits in response to communications received on April 21, 2010. Claims 1-43 are currently pending and have been addressed below.

#### ***Claim Objections***

1. Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 8 recites receiving the input from the customer which is claimed in the independent Claim 7 wherein it states receiving a request for a product from a customer and an input being received at the vending and from the customer that a customer service issue exists.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 39-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Mahaffy et al. (US 2002/0087413).

**As per Claim 39**, Mahaffy et al. discloses a method comprising:

identifying, by the vending machine, a transaction at the vending machine ([0032] via detecting a customer input at a vending machine), wherein the identifying comprises:

receiving, by the vending machine, an indication of a request from a customer to purchase a unit of a product sold via the vending machine; and

receiving by the vending machine, an indication of a payment by the customer for the requested unit of product ([0032] via the customer selected the item for purchase and tenders payment in either cash or credit/debit card in response to prompts from the vending machine);

receiving, by the vending machine and after at least one of the receiving of the indication of the request for the unit of product and the receiving of the indication of the payment for the requested unit of product, an indication of a malfunction of the machine that has occurred with respect to the identified transaction ([0032] via receiving an indication that a proof of again is required);

establishing, by the vending machine and in response to the receiving of the indication of the malfunction, a communication link between the vending machine and a remote customer service device operated by a customer service representative ([0032-0033] via the vending machine contacting the remote service center to alert a human operator that approval is required);

transmitting, by the vending machine and after the establishing of the communication link, information provided by the customer, to the remote customer service device operated by the customer service representative ([0032-0034] discloses the vending machine transmitting photo identification information provided by the customer to the remote customer service center operated by a human operator);

receiving, by the vending machine and from the remote customer service device operated by the customer service representative, and in response to the transmitting of the information provided by the customer, an instruction to output a resolution to the customer ([0038-0039] discloses the vending machine receiving instruction from the remote service center to authorize a transaction and provide an audio/video message indicating the purchase approval); and

outputting, by the vending machine and in response to the receiving of the instruction to output the resolution to the customer, the instructed resolution to the customer ([0039] via an audio/video message is provided by the vending machine indicating the purchase approval and thanking the buyer for the purchase).

**As per Claim 40**, Mahaffy et al. discloses transmitting, by the vending machine and after the establishing of the communication link, diagnostic data of the vending machine to the remote customer service device operated by the customer service representative ([0032-0033] discloses the vending machine transmitting the calculated probabilities that the buyer is the person shown in the

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buyer's photo identification and the buyer is sober to the human operator via the remote service center).

**As per Claim 41**, Mahaffy et al. discloses the resolution is based on the diagnostic data transmitted by the vending machine to the remote customer service device operated by the customer service representative ([0035-0037] discloses the human operator making the determination of the approval of a transaction based on the calculated probabilities provided by the artificial intelligence routines performed by the vending machine).

**As per Claim 42**, Mahaffy et al. discloses the resolution is based on the information provided by the customer and transmitted by the vending machine to the remote customer service device operated by the customer service representative ([0035-0037] discloses the human operator making a determination of the approval of a transaction based on the photo identification of the buyer and the video image of the buyer which is provided by the purchaser).

**As per Claim 43**, Mahaffy et al. discloses the resolution is based on at least one of: (i) an identity of the customer; (ii) an assessed genuineness of the information provided by the customer; and (iii) an assessed value of the customer ([0035-0037] discloses the human operator making a determination of the approval of a transaction based on the photo identification of the buyer and the video image of the buyer which is provided by the purchaser).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7, 8, 17, 19-22, and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (6,324,520) in view of Kolls (6,606,602).

**As per Claim 7**, Walker et al. discloses a method comprising:

receiving, via a customer interface of a vending machine and from a customer, a request for a product to be dispensed from the vending machine (Claim 1, discloses receiving a selection (i.e. a request) of a first product from the purchaser);

determining, by the vending machine and based on input received at the vending machine and from the customer, that a customer service issue exists (Col. 2, Line 65-Col. 3, Line 7, discloses determining whether the product requested by the customer is available, if it is determined that the product is unavailable a customer issue exists); determining, by the vending machine, whether to provide a resolution to the customer service issue (Col. 7, Line 24-Col. 8, Line 2, discloses determining what product should be offered as a resolution to the purchaser based on criterion such as the average demand rate, which product is due to be restocked at the earliest date, or which product will

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expire at the earliest date); and providing, by the vending machine and in the case that it is determined that the resolution should be provided, the resolution to the customer (Col. 7, Lines 42-49, discloses offering the purchaser a substitute product (i.e. second product) if the product requested by the purchaser is not available).

However, Walker et al. fails to explicitly disclose determining whether to provide a resolution based on a coin inventory available.

Kolls discloses a vending machine control system with the concept of determining whether to provide a resolution based on a coin inventory available (Col. 2, Lines 29-44, discloses the concept of the coin inventory of a vending machine being depleted. Col. 23, Line 52-Col. 24, Line 13, discloses determining that an issue exists such as "out of supplies" (i.e. coin inventory depleted) and taking action to correct the problem).

Therefore, from the teaching of Kolls, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and apparatus for collecting and applying vending machine demand information of Walker et al. to include determining whether to provide a resolution based on a coin inventory available as taught by Kolls in order to aid in properly compensating a customer for the money owed to the customer and promoting customer satisfaction.

**As per Claim 8**, Walker et al. discloses receiving the input from the customer (Claim 1, discloses receiving a selection (i.e. a request) of a first product from the purchaser).



**As per Claim 17**, Walker et al. discloses selecting, by the vending machine and based on the coin inventory available at the vending machine, the resolution from a plurality of available resolutions (Col. 7, Line 24-Col. 8, Line 2, discloses determining what product should be offered as a resolution to the purchaser based on criterion such as the average demand rate, which product is due to be restocked at the earliest date, or which product will expire at the earliest date).

However, Walker et al. fails to explicitly disclose determining whether to provide a resolution based on a coin inventory available.

Kolls discloses a vending machine control system with the concept of determining whether to provide a resolution based on a coin inventory available (Col. 2, Lines 29-44, discloses the concept of the coin inventory of a vending machine being depleted. Col. 23, Line 52-Col. 24, Line 13, discloses determining that an issue exists such as "out of supplies" (i.e. coin inventory depleted) and taking action to correct the problem).

Therefore, from the teaching of Kolls, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and apparatus for collecting and applying vending machine demand information of Walker et al. to include determining whether to provide a resolution based on a coin inventory available as taught by Kolls in order to aid in properly compensating a customer for the money owed to the customer and promoting customer satisfaction.

**As per Claim 19**, Walker et al. discloses providing of the resolution to the vending machine customer comprises at least one of: a reservation of a product in a vending machine on behalf of the customer; providing the customer with money via the vending machine; establishing a credit balance at the vending machine; applying credit toward a customer account of the customer; providing a compensation code to the customer; providing to the customer a voucher that is redeemable for a benefit from the vending machine; providing to the customer a voucher that is redeemable for a benefit from another vending machine; and providing to the customer a voucher that is redeemable for a product from a retail store (Fig. 1 & 4; Col. 2, Line 65-Col. 3, Line 7, discloses a product identifier (i.e. compensation code) being provided to the purchaser to be used by the purchaser to receive the substitute product).

**As per Claim 20**, Walker et al. discloses the providing of the resolution comprising: providing an offer for a second product other than the first product indicated by the request (Abstract, discloses providing a purchaser a substitute product (i.e. second product) when a particular product selected by a purchaser is unavailable).

**As per Claim 21**, Walker et al. discloses determining a customer service issue (Col. 2, Line 65-Col. 3, Line 7, discloses determining whether the product requested by the customer is available, if it is determined that the product is unavailable a customer issue exists).

However, Walker et al. fails to explicitly disclose the customer issue being due to the customer not following instructions and not providing a resolution due to the customer not following instructions.

Examiner takes Official Notice that it is well known in the art of vending machine that when using a vending machine, if a customer mistakenly enters the wrong product code for a product desired by the customer (i.e. failing to follow instructions) then the product the customer is dispensed and the customer is not given the opportunity to enter the correct product code. For example, vending machine providing snacks allow a customer to enter a code but do not offer a "confirm option" or a delete option when entering the product code in order to correct a product code that has been entered incorrectly.

**As per Claim 22**, Walker et al. discloses receiving the input from the customer via a microphone of the vending machine; and recording audio input received via the microphone (Col. 5, Lines 1-12, discloses receiving input from a purchaser via a voice recognition device (i.e. a microphone)) and storing the information received).

**As per Claim 25**, Walker et al. discloses recording data associated with the customer service issue (Col. 11, Line 24-Col. 12, Line 17, discloses storing (i.e. recording) data pertaining the a product selected by a purchaser and data pertaining to products that have been offered to a purchaser to substitute the product originally requested by the purchaser); and determining a unique identifier for the customer service issue (Col. 12, Lines 18-35, discloses

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determining a product identifier that is to be presented to a purchaser in order to resolve a customer service issue).

**As per Claim 26**, Walker et al. discloses determining the resolution further based on the recorded data (Col. 11, Lines 46-64, discloses determining a substitute product to offer a purchaser based on data stored on the suggestive sell database); and communicating an indication of the determined resolution to the customer (Col. 12, Lines 18-28, discloses displaying to a purchaser the substitute product).

**As per Claim 27**, Walker et al. discloses receiving, via the customer interface of the vending machine and from the customer, information which identifies the customer (Col. 6, Lines 23-34, discloses a detector that detects a presence of a purchaser when he or she is in proximity of the vending machine and outputs a signal indicative of the presence of the purchaser).

**As per Claim 28**, Walker et al. discloses outputting, to the customer, the unique identifier (Col. 12, Lines 18-35, discloses displaying to the purchaser the product identifier corresponding to the suggested substitute product).

**As per Claim 29**, Walker et al. discloses displaying an alphanumeric code (Figs. 3-6, discloses the product identifier being an alphanumeric code (i.e. A1, A2, A3)).

Examiner asserts that the alphanumeric code being indicative of a malfunction of the vending machine that caused the customer service issue is considered non-functional descriptive material. The purpose of the code being displayed does not change the function of the claimed invention.

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6. Claims 1-4, 6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (6,324,520) in view of PTS: Vending Machine Refund System (May 02, 2004); herein after known as "PTS").

**As per Claim 1**, Walker et al. discloses a method comprising:

receiving, by a vending machine and from a customer, a request for a product to be dispensed by the vending machine, in which the request indicates a first product (Claim 1, discloses receiving a selection (i.e. a request) of a first product from the purchaser);

determining, by the vending machine, whether to provide a resolution to the customer service issue (Col. 2, Line 65-Col. 3, Line 7, discloses determining substitute products and/or services (i.e. resolutions) to offer when a selected product and/or service is unavailable (i.e. customer service issue); and

providing, by the vending machine and to the customer, an offer for a second product that is not the first product (Claim 1, discloses offering a substitute product (i.e. second product) to the purchaser).

However, Walker et al. fails to explicitly disclose providing a plurality of selectable menu options defining a customer service issue; and receiving, from the customer a selection of at least one of the menu options.

PTS discloses an online vending refund system with the concept of providing a plurality of selectable menu options, each of which defines at least one customer service issue (discloses a vending refund form that a customer fill out, wherein the form contains selectable menu options via a drop down list to identify the date that the customer service issue occurred, the vending machine

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that created the issue (via machine type), and the reason for the issue (via a reason for refund request)); and receiving, from the customer, a selection of at least one of the menu options, thereby defining an indication of a customer service issue (discloses the customer filling out the vending refund form including selecting from the menu option and submitting the form via online).

Therefore, from the teaching of PTS, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system for collecting and applying vending machine demand information of Walker et al. to include providing a plurality of selectable menu options defining a customer service issue; and receiving, from the customer a selection of at least one of the menu options as taught by PTS in order to identify trends for certain vending machines in relation to malfunctions.

**As per Claim 2**, Walker et al. discloses providing an offer for one of the second product, and a refund (Abstract and Claim 1, discloses offering the substitute product (i.e. second product) to the purchaser).

**As per Claim 3**, Walker et al. discloses determining that a sales velocity of the second product is less than a threshold (Col. 7, Lines 30-41, discloses the suggestive sell (i.e. second product) criterion may be a requirement that the average demand for a product associated with the criterion is below a certain average demand rate).

**As per Claim 4**, Walker et al. discloses determining whether to provide a resolution to the customer service issue based on sales velocity of the second product (Col. 7, Lines 30-41, discloses the suggestive sell (i.e. second product)

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criterion may be a requirement that the average demand for a product associated with the criterion is below a certain average demand rate).

**As per Claim 6**, Walker et al. discloses a method comprising: receiving, by a vending machine and from a customer, a request for a product to be dispensed by a vending machine, in which the request indicates a first product (Claim 1, discloses receiving a selection (i.e. a request) of a first product from the purchaser); determining, by the vending machine, that the vending machine has malfunctioned (Col. 2, Line 65-Col. 3, Line 7, discloses receiving a selection of a first product from a purchaser and determining the availability of the first product (i.e. whether it is unable to be dispensed), if the product is not available (i.e. a malfunction), a substitute product is offered); determining, by the vending machine, that a sales velocity of a second product is less than a threshold (Col. 7, Lines 30-41, discloses the suggestive sell (i.e. second product) criterion may be a requirement that the average demand for a product associated with the criterion is below a certain average demand rate); determining, by the vending machine, whether to provide a resolution to the customer service issue based on the sales velocity (Col. 7, Lines 30-41, discloses the suggestive sell (i.e. second product) criterion may be a requirement that the average demand for a product associated with the criterion is below a certain average demand rate); and providing, by the vending machine and to the customer, a compensation code that is redeemable for a second product (Fig. 1 7 4; Col. 2, Line 65-Col. 3, Line 7, discloses a product identifier (i.e. code) being provided to the purchaser to be used by the purchaser to receive the substitute product (i.e. second product)).

However, Walker et al. fails to explicitly disclose providing a plurality of selectable menu options defining a customer service issue; and receiving, from the customer a selection of at least one of the menu options.

PTS discloses an online vending refund system with the concept of providing a plurality of selectable menu options, each of which defines at least one customer service issue (discloses a vending refund form that a customer fill out, wherein the form contains selectable menu options via a drop down list to identify the date that the customer service issue occurred, the vending machine that created the issue (via machine type), and the reason for the issue (via a reason for refund request)); and receiving, from the customer, a selection of at least one of the menu options, thereby defining an indication of a customer service issue (discloses the customer filling out the vending refund form including selecting from the menu option and submitting the form via online).

Therefore, from the teaching of PTS, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system for collecting and applying vending machine demand information of Walker et al. to include providing a plurality of selectable menu options defining a customer service issue; and receiving, from the customer a selection of at least one of the menu options as taught by PTS in order to identify trends for certain vending machines in relation to malfunctions.

**As per Claim 9**, Walker et al. discloses the claimed invention as applied to Claim 8, above. However, Walker et al. fails to explicitly disclose providing a



plurality of selectable menu options defining a customer service issue; and receiving, from the customer a selection of at least one of the menu options.

PTS discloses an online vending refund system with the concept of providing a plurality of selectable menu options, each of which defines at least one customer service issue (discloses a vending refund form that a customer fill out, wherein the form contains selectable menu options via a drop down list to identify the date that the customer service issue occurred, the vending machine that created the issue (via machine type), and the reason for the issue (via a reason for refund request)); and receiving, from the customer, a selection of at least one of the menu options, thereby defining an indication of a customer service issue (discloses the customer filling out the vending refund form including selecting from the menu option and submitting the form via online).

Therefore, from the teaching of PTS, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system for collecting and applying vending machine demand information of Walker et al. to include providing a plurality of selectable menu options defining a customer service issue; and receiving, from the customer a selection of at least one of the menu options as taught by PTS in order to identify trends for certain vending machines in relation to malfunctions.

7. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (6,324,520) in view of PTS: Vending Machine Refund System (May 02, 2004); herein after known as "PTS"), as applied to claim 1 and 9 above, and further in view of Whitten et al. (7,286,901).

**As per Claim 5**, the Walker et al. discloses determining that the first product is unable to be dispensed from the vending machine (Col. 2, Line 65-Col. 3, Line 7, discloses receiving a selection of a first product from a purchaser and determining the availability of the first product (i.e. whether it is unable to be dispensed), if the product is not available, a substitute product is offered).

However, the Walker et al. and PTS combination fails to explicitly disclose disabling the ability to request the first product.

Whitten et al. discloses a vending system with the concept of disabling the ability to request the first product (Col. 3, Lines 15-20, discloses preventing (i.e. disabling) future vend attempts for the first ordered product until the vending machine is visited by a service person).

Therefore, from the teaching of Whitten et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Walker et al. and PTS combination to include disabling the ability to request the first product as taught by Whitten et al. in order to help prevent cheating of the customer and further tampering.

**As per Claim 10**, Walker et al. discloses the claimed invention as applied to Claim 9, above. PTS discloses defining a plurality of selectable menu options (Pages 1-3, via the drop down menu for "Reason for Refund Request").

However, the Walker et al. and PTS combination fails to explicitly disclose determining diagnostic data of the vending machine; and determining, based on the diagnostic data, at least one of the plurality of selectable menu options.

Whitten et al. discloses a vending system with the concept of determining, by at least one sensor of the vending machine, diagnostic data of the vending machine (Col. 3, Lines 30-52, discloses determining whether a product the light continuity and prevents a portion of the light from reaching at least one detector on the opposite side of the monitoring path, wherein the logic circuit on the detecting arm will note the monetary blockage of the light and report it as a delivery of the product).

Therefore, from the teaching of Whitten et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Walker et al. and PTS combination to include determining diagnostic data of the vending machine as taught by Whitten et al. in order to identify issues relating to the vending machine.

8. Claims 11-15, 18, 23, 24, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (6,324,520) in view of Whitten et al. (7,286,901).

**As per Claim 11**, Walker et al. discloses the claimed invention as applied to Claim 7, above. However, Walker et al. fails to explicitly disclose determining that the vending machine has malfunctioned.

Whitten et al. discloses a vending system with the concept of determining, by the vending machine, that the vending machine has malfunctioned (Col. 7, Lines 24-30, discloses detecting that a delivery of a product was not made or that an error occurred via the vending machine).

Therefore, from the teaching of Whitten et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system for collecting and applying vending machine demand information of Walker et al. to include determining that the vending machine has malfunctioned as taught by Whitten et al. in order to identify issues relating to the vending machine.

**As per Claim 12**, Walker et al. discloses the claimed invention as applied to Claim 11, above. However, Walker et al. fails to explicitly disclose malfunction comprising the vending machine dispensing the wrong product.

**As per Claim 13**, Walker et al. discloses the claimed invention as applied to Claim 11, above. However, Walker et al. fails to explicitly disclose the malfunction comprises a failure of the vending machine to perform one or more of: (i) a playing of a movie trailer; (ii) a playing of a game; (iii) a rendering of a game result; and (iv) a playing of an audio file.

Whitten et al. discloses a vending system with the concept of the malfunction comprises a failure of the vending machine to perform one or more of: (i) a playing of a movie trailer; (ii) a playing of a game; (iii) a rendering of a game result; and (iv) a playing of an audio file (Col. 7, Lines 24-30, discloses detecting that a delivery of a product was not made (i.e. failure to play a game) or that an error occurred (i.e. failure to render a game result) via the vending machine).

Therefore, from the teaching of Whitten et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the

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method and system for collecting and applying vending machine demand information of Walker et al. to include the malfunction comprises a failure of the vending machine to perform one or more of: (i) a playing of a movie trailer; (ii) a playing of a game; (iii) a rendering of a game result; and (iv) a playing of an audio file as taught by Whitten et al. in order to identify issues relating to the vending machine.

**As per Claims 14 and 15**, Walker et al. discloses a system for collecting vending machine information comprising: a coin acceptor that detects the amount of money received from coinage deposited into a dispensing device; a card reader that receives electronic currency from a card and applies a charge against the card for a product selected and dispensed by a dispensing device; and a bill validator that accepts and determines an amount of money received from monetary bills deposited into a dispensing device (Col. 5, Lines 57-Col. 6, Line 7). However, Walker et al. fails to explicitly disclose the vending machine not processing payment correctly.

Whitten et al. discloses a vending system with the concept of the malfunction comprising: the vending machine has not processed payment correctly; and the vending machine has not properly credited payment that is tendered by the customer (Col. 7, Lines 24-30, discloses detecting that a delivery of a product was not made or that an error occurred via the vending machine).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have an error detected include a payment being processed incorrectly.

Therefore, from the teaching of Whitten et al., it would have been obvious to one of ordinary skill in the art at the time the invention to modify the method and system for collecting and applying vending machine demand information of Walker et al. to include the vending machine not processing payment correctly as taught by Whitten et al. in order to identify issues relating to the vending machine.

**As per Claim 18**, Walker et al. discloses prompting, by the vending machine, the customer to verify information regarding the vending machine malfunction (Col. 12, Lines 18-35, via prompting the purchaser to enter the product identifier of the substitute product in order to indicate acceptance of the resolution to the vending machine malfunction); and receiving, via the customer interface of the vending machine and from the customer, a response to the prompt (Col. 12, Lines 18-35, discloses receiving the product identifier entered by the purchaser).

**As per Claim 23**, Walker et al. discloses the claimed invention as applied to Claim 7, above. However, Walker et al. fails to explicitly disclose determining that the customer service issue comprises a jammed dispensing row of the vending machine.

Whitten et al. discloses a vending system with the concept of determining that the customer service issue comprises a jammed dispensing row of the vending machine (Abstract; Col. 7, Lines 55-67, discloses determining whether a blockage (i.e. jammed dispensing row) has occurred causing the vending machine to malfunction).

Therefore, from the teaching of Whitten et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system for collecting and applying vending machine demand information of Walker et al. to include the customer service issue comprises a jammed dispensing row of the vending machine as taught by Whitten et al. in order to identify issues relating to the vending machine.

**As per Claim 24**, Walker et al. discloses marking a product as "empty" when a product selected by a purchaser has failed to dispense in order to prevent future vend attempts (Col. 3, Lines 3-20).

However, Walker et al. fails to explicitly disclose altering a product display window to impede view of the product stored in the jammed row by the customer.

Examiner asserts it would have been obvious to one of ordinary skill in the art at the time the invention was made to impede the view of a product stored in a jammed row in order to prevent future vend attempts.

**As per Claim 30**, Walker et al. discloses the claimed invention as applied to Claim 25, above. However, Walker et al. fails to explicitly disclose determining and recording diagnostic data of the vending machine.

Whitten et al. discloses a vending system with the concept of determining diagnostic data of the vending machine (Col. 3, Lines 30-52, discloses determining whether a product the light continuity and prevents a portion of the light from reaching at least one detector on the opposite side of the monitoring path, wherein the logic circuit on the detecting arm will note the momentary

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blockage of the light and report is as a delivery of the product); and recording the diagnostic data (Fig. 8, via recording failure to deliver a product (814)).

Examiner asserts the diagnostic data including at least one digital image of at least on vending machine component is considered non-functional descriptive material. The type of data does not affect the function of determining diagnostic data. Examiner asserts Whitten et al. is fully capable of having diagnostic data include at least one digital image of at least on vending machine component.

Therefore, from the teaching of Whitten et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system for collecting and applying vending machine demand information of Walker et al. to include determining and recording diagnostic data of the vending machine as taught by Whitten et al. in order to identify issues relating to the vending machine.

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (6,324,520) in view of Whitten et al. (7,286,901), as applied to claim 14 above, and further in view of PTS: Vending Machine Refund System (May 02, 2004); herein after known as "PTS").

Walker et al. discloses the claimed invention as applied to Claim 14, above. However, Walker et al. fails to explicitly disclose malfunction comprising the vending machine has not properly dispensed payment that is due to the customer.



Whitten et al. discloses a vending system with the concept of determining that the vending machine has malfunctioned (Col. 7, Lines 24-30, discloses detecting that a delivery of a product was not made or that an error occurred via the vending machine).

Therefore, from the teaching of Whitten et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system for collecting and applying vending machine demand information of Walker et al. to include determining that the vending machine has malfunctioned as taught by Whitten et al. in order to identify issues relating to the vending machine.

PTS discloses an online vending refund system with the concept of a vending malfunction comprising not properly dispensing payment that is due to a customer (Page 2, discloses a customer requesting a refund due to the vending machine refund button not working resulting in a failure to provide a refund due to a customer).

Therefore, from the teaching of Whitten et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Walker et al. and Whitten et al. combination to include the vending machine has not properly dispensed payment that is due to the customer as taught by PTS in order to identify trends for certain vending machines in relation to malfunctions.

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10. Claims 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (6,324,520) in view of Joshi (US 2002/0099662).

**As per Claim 31**, Walker et al. discloses a vending machine, comprising:  
a processor (Fig. 1, Col. 4, Lines 51-67, via central processing unit); and  
a memory in communication with the processor, the memory storing instructions (Fig. 1, Col. 4, Lines 51-67, via the central processing unit being connected to an random access memory, read-only memory; wherein the memory stores processing instructions for the operation of the dispensing device) that when executed by the processor cause the vending machine to:

receive an indication of a customer service issue at the vending machine (Col. 2, Line 65-Col. 3, Line 7, discloses determining whether the product requested by the customer is available, if it is determined that the product is unavailable a customer issue exists);

select one of a plurality of available remedies to provide to the customer (Col. 7, Line 24-Col. 8, Line 2, discloses determining what product should be offered as a resolution to the purchaser based on criterion such as the average demand rate, which product is due to be restocked at the earliest date, or which product will expire at the earliest date); and

provide, to the customer, a compensation code indicative of the selected remedy (Figs 3-6; Col. 12, Lines 18-35, discloses displaying to the purchaser the product identifier corresponding to the suggested substitute product, wherein the product identifier is an alphanumeric code).

However, Walker et al. fails to explicitly disclose the vending machine in communication with a wireless handheld customer device.

Joshi discloses a method and system for purchasing goods from a vending machine utilizing a wireless device with the concept of the vending machine in communication with a wireless handheld customer device (Abstract, discloses utilizing a wireless device to receive and transmit data to and from a vending machine).

Therefore, from the teaching of Joshi, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system for collecting and applying vending machine demand information of Walker et al. to include the vending machine in communication with a wireless handheld customer device as taught by Joshi in order to aid in remotely providing access to the vending machine.

**As per Claim 32**, Walker et al. discloses a printer that provides the compensation code via a printed voucher (Col. 5, Lines 13-28, via the output device being a printer for broadcasting messages to a purchaser, wherein a message includes (Col. 12, Lines 18-35) a product identifier corresponding to the suggested substitute product, wherein the product identifier being an alphanumeric code).

**As per Claim 33**, Walker et al. discloses the claimed invention as applied to Claim 32, above. However, Walker et al. fails to explicitly disclose the printer voucher comprising a barcode indicative of the compensation code.

Examiner asserts that a barcode being on a voucher is considered non-functional descriptive material. The type of code being provided on the voucher does not change the function of the claimed invention. Examiner asserts Walker et al. is fully capable to providing a barcode indicative of the compensation code.

**As per Claim 34**, Walker et al. discloses providing a compensation code to a customer (Col. 5, Lines 13-28, via the output device being a printer for broadcasting messages to a purchaser, wherein a message includes (Col. 12, Lines 18-35) a product identifier corresponding to the suggested substitute product, wherein the product identifier being an alphanumeric code).

**As per Claim 35**, Walker et al. discloses the claimed invention as applied to Claim 34, above. However, Walker et al. fails to explicitly disclose the transmitting being conducted via one or more of: (i) electronic mail; (ii) text messaging; and (iii) infrared radiation.

Joshi discloses a method and system for purchasing goods from a vending machine utilizing a wireless device with the concept of the transmitting being conducted via one or more of: (i) electronic mail; (ii) text messaging; and (iii) infrared radiation ([0011] discloses the wireless device communicating with the vending machine via an infrared signal).

Therefore, from the teaching of Joshi, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system for collecting and applying vending machine demand information of Walker et al. to include the transmitting being conducted via one or more of: (i) electronic mail; (ii) text messaging; and (iii) infrared radiation as

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taught by Joshi in order to aid in remotely providing access to the vending machine.

**As per Claim 36**, Walker et al. discloses the vending machine receiving an indication of the compensation code (Col. 11, Line 59-Col. 12, Line 17, discloses receiving a substitute product identifier if the product selected by the purchaser is out of stock); and providing the remedy to the customer (Col. 11, Line 59-Col. 12, Line 35, discloses providing the substitute product identifier to the purchaser).

However, Walker et al. fails to explicitly disclose the vending machine being in communication with a wireless handheld customer device.

Joshi discloses a method and system for purchasing goods from a vending machine utilizing a wireless device with the concept of the vending machine in communication with a wireless handheld customer device (Abstract, discloses utilizing a wireless device to receive and transmit data to and from a vending machine).

Therefore, from the teaching of Joshi, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system for collecting and applying vending machine demand information of Walker et al. to include the vending machine in communication with a wireless handheld customer device as taught by Joshi in order to aid in remotely providing access to the vending machine.

**As per Claim 37**, Walker et al. discloses the claimed invention as applied to Claim 36, above. However, Walker et al. fails to explicitly disclose receiving of

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the indication of the compensation code from the wireless handheld customer device, comprises one or more of: (i) reading information indicative of the compensation code from a display screen of the wireless handheld customer device operated by the customer of the vending machine; (ii) detecting a DTMF signal transmitted by a speaker of the wireless handheld customer device operated by the customer of the vending machine, wherein the DTMF signal is indicative of the compensation code; and (iii) receiving a wireless signal from the wireless handheld customer device operated by the customer of the vending machine, wherein the wireless signal is indicative of the compensation code.

Joshi discloses a method and system for purchasing goods from a vending machine utilizing a wireless device with the concept of receiving of the indication of the compensation code from the wireless handheld customer device, comprises one or more of: (i) reading information indicative of the compensation code from a display screen of the wireless handheld customer device operated by the customer of the vending machine; (ii) detecting a DTMF signal transmitted by a speaker of the wireless handheld customer device operated by the customer of the vending machine, wherein the DTMF signal is indicative of the compensation code; and (iii) receiving a wireless signal from the wireless handheld customer device operated by the customer of the vending machine, wherein the wireless signal is indicative of the compensation code ([0011-0012] via receiving a code from a wireless device operated by a customer via a wireless signal).

Therefore, from the teaching of Joshi, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system for collecting and applying vending machine demand information of Walker et al. to include receiving a wireless signal from the wireless handheld customer device operated by the customer of the vending machine, wherein the wireless signal is indicative of the compensation code as taught by Joshi in order to aid in remotely providing access to the vending machine.

**As per Claim 38**, Walker et al. discloses the claimed invention as applied to Claim 31, above. However, Walker et al. fails to explicitly disclose the wireless handheld customer device comprising one or more of: (i) a cellular telephone; (ii) a PDA device; (iii) a pager; (iv) a personal music player; (v) a gaming device; and (vi) a personal computer.

Joshi discloses a method and system for purchasing goods from a vending machine utilizing a wireless device with the concept of the wireless handheld customer device comprising one or more of: (i) a cellular telephone; (ii) a PDA device; (iii) a pager; (iv) a personal music player; (v) a gaming device; and (vi) a personal computer ([0010] via the wireless device comprising a PDA device; cell phone; laptop; and a notebook).

Therefore, from the teaching of Joshi, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system for collecting and applying vending machine demand information of Walker et al. to include the wireless handheld customer device

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comprising one or more of: (i) a cellular telephone; (ii) a PDA device; (iii) a pager; (iv) a personal music player; (v) a gaming device; and (vi) a personal computer as taught by Joshi in order to aid in remotely providing access to the vending machine.

### ***Response to Arguments***

11. Applicant's arguments filed April 21, 2010 have been fully considered but they are not persuasive.

With respect to Applicant's arguments regarding the claim objection for Claim 8, Examiner respectfully disagrees. Examiner asserts Claim 8 fails to further limit the subject matter of the claim from which it depends from, Claim 7. Claim 8 recites receiving the input from the customer which is claimed in the independent Claim 7 wherein it states receiving a request for a product from a customer and an input being received at the vending and from the customer that a customer service issue exists.

With respect to Claims 39-43, Applicant argues that Mahaffy fails to disclose "receiving, by the vending machine and after at least one of the receiving of the indication of the request for the unit of product and the receiving of the indication of the payment for the requested unit of product, an indication of a malfunction of the vending machine that has occurred with respect to the identified transaction." Examiner respectfully disagrees. Examiner asserts that Mahaffy discloses receiving and indication by the vending machine after at least one of receiving of the indication of the request for the unit of product and the



receiving of the indication of the payment for the requested unit of product ([0032] discloses the vending machine receiving an indication that a proof of identification is required in response to receiving an indication of the request for the unit of product.) Examiner asserts that the type of indication received by the vending machine holds little patentable weight in the method claim. Examiner asserts that type of indication does not affect the method steps claimed in Claim 39. Examiner asserts that Mahaffy is fully capable of having the indication of a malfunction of the vending machine that has occurred with respect to the identified transaction.

Applicant's arguments, see Remarks, page 14, filed April 21, 2010, with respect to the rejection(s) of claim(s) 7-8, 17, 19-22, and 25-29 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kolls (6,606,602).

As per Claims 1-4, 6, and 9, in response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this

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case, both Walker et al. and PTS deal with the concept of vending machines. Examiner asserts it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the known feature of resolving a customer service issue in regards to a vending machine as taught by Walker et al. with the known feature of providing a customer with a selectable menu option to identify the customer service issue as taught by PTS in order provide the predictable result of identify and rectifying a customer service issue; and identify trends for certain vending machines in relation to malfunctions.

As per Claims 5, 10-16, 18, 23-24, and 30, in response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, Walker et al., PTS, and Whitten focus on the concept of vending machines. Examiner asserts it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the known feature of resolving a customer service issue in regards to a vending machine as taught by Walker et al. with the known feature of providing a customer with a selectable menu option to identify the customer service issue as taught by PTS

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and with the known feature of disabling future vending attempts of Whitten et al. in order to provide the predictable result of resolving vending machines malfunctions and customer service issues related to the vending machine malfunctions.

As per Claims 31-38, in response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, Walker et al. and Joshi both focus on the concept of vending machines. Examiner asserts it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the known feature of resolving a customer service issue in regards to a vending machine as taught by Walker et al. with the known feature of providing a wireless handheld customer device in order to provide the predictable result of resolving customer service issues by providing compensation to a customer for a vending machine malfunction.

***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FONYA LONG whose telephone number is (571)270-5096. The examiner can normally be reached on Mon-Thurs. 7:30am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on (571) 272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. L./

Examiner, Art Unit 3689

/Dennis Ruhl/

Primary Examiner, Art Unit 3689